

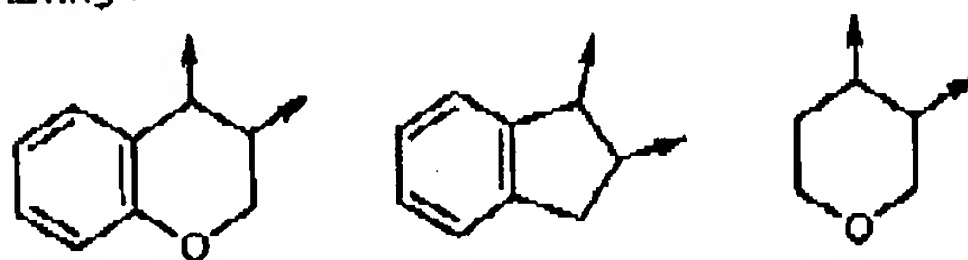
IN THE CLAIMS:

1. (Original) A compound of the formula (I)



in which

- R^1 represents methyl, ethyl, n-propyl, isopropyl, hydroxyl, methylsulfonyl, ethylsulfonyl, phenylsulfonyl, p-methylphenylsulfonyl, or benzyl that is optionally substituted by halogen, nitro, C_1 - C_4 -alkyl, or C_1 - C_4 -alkoxy,
- R^2 represents C_1 - C_4 -alkyl, hydroxyl, methylsulfonyl, ethylsulfonyl, phenylsulfonyl, p-methylphenylsulfonyl, phenyl that is optionally substituted by halogen, NO_2 , C_1 - C_4 -alkyl, C_1 - C_4 -halogenoalkyl, C_1 - C_4 -alkylsulfonyl, C_1 - C_4 -alkoxy, C_1 - C_4 -halogenoalkoxy, C_1 - C_4 -alkoxycarbonyl, C_1 - C_4 -halogenoalkoxycarbonyl, C_1 - C_4 -alkylcarbonyloxy, or C_1 - C_4 -halogenoalkylcarbonyloxy, benzyl that is optionally substituted by halogen, nitro, C_1 - C_4 -alkyl, or C_1 - C_4 -alkoxy, or pyrrolyl, thienyl, naphthyl, or benzothiophenyl, each of which is optionally substituted by halogen, C_1 - C_4 -alkyl, or C_1 - C_4 -halogenoalkyl,
- R^3 represents hydrogen, methyl, or ethyl, or
- R^2 and R^3 together represent $-(CH_2)_n-$ that is optionally substituted by halogen, NO_2 , carboxyl, carbonyl, C_1 - C_4 -alkyl, C_1 - C_4 -halogenoalkyl, C_1 - C_4 -alkoxy, or C_1 - C_4 -halogenoalkoxy or the optionally halogen-, NO_2 -, C_1 - C_4 -alkyl-, C_1 - C_4 -halogenoalkyl-, C_1 - C_4 -alkoxy-, or C_1 - C_4 -halogenoalkoxy-substituted groups having the formulas



where the arrows mark the points of linkage to the thiazole ring, and

n represents 3, 4 or 5,

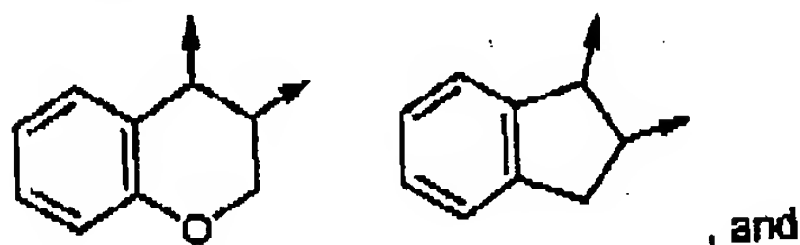
R^4 represents bromine or chlorine, and

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X⁻ represents chloride, bromide, iodide, hydrogen sulfate, ½ equivalent of sulfate, sulfite, hexachloroantimonate, methanesulfonate, trifluoromethanesulfonate, p-toluenesulfonate, tetrafluoroborate, tetraphenylborate, or hexafluorophosphate, excluding the compounds 2-bromo-3-ethyl-4-methylthiazolium tetrafluoroborate and 2-bromo-3-ethyl-4-methylthiazolium hexachloroantimonate, 2-chloro-3-ethyl-4-methylthiazolium tetrafluoroborate and 2-chloro-3-ethyl-4-methylthiazolium hexachloroantimonate, 2-bromo-3-methyl-4-phenylthiazolium tetrafluoroborate, 2-chloro-3-ethyl-4,5-dimethylthiazolium tetrafluoroborate, and 2-chloro-3,4-dimethylthiazolium tetrafluoroborate.

2. (Original) A compound of the formula (I) according to Claim 1 wherein R¹ represents methyl, ethyl, n-propyl, hydroxyl, methylsulfonyl, ethylsulfonyl, or benzyl that is optionally substituted by fluorine and/or chlorine, methyl, ethyl, n- or i-propyl, trifluoromethyl, methoxy, ethoxy, or n- or i-propoxy, R² represents methyl, ethyl, n-propyl, isopropyl, n-butyl, sec-butyl, isobutyl, or benzyl or phenyl that is optionally substituted by fluorine and/or chlorine, methyl, ethyl, n- or i-propyl, methoxy, ethoxy, or n- or i-propoxy, R³ represents hydrogen or methyl, or R² and R³ together represent -(CH₂)_n- substituted by fluorine and/or chlorine, methyl, ethyl, trifluoromethyl, methoxy, ethoxy, or carbonyl or the groups having the formulas



n represents 3 or 4, R⁴ represents bromine, and X⁻ represents bromide, ½ equivalent of sulfate, sulfite, SbCl₆⁻, mesylate, triflate, tosylate, tetrafluoroborate, tetraphenylborate, or hexafluorophosphate.

3. (Original) A compound of the formula (I) according to Claim 1 wherein R¹ represents methyl, ethyl, methylsulfonyl, ethylsulfonyl, or benzyl that is optionally substituted by fluorine and/or chlorine,

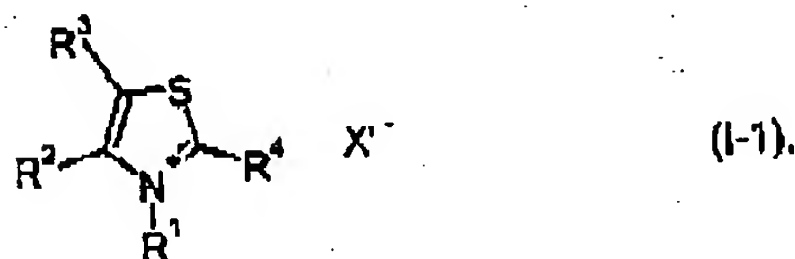
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- R^2 represents methyl, ethyl, n-propyl, n-butyl, or phenyl that is optionally substituted by fluorine and/or chlorine, methyl, or ethyl,
- R^3 represents hydrogen, or
- R^2 and R^3 together represent $-(CH_2)_n-$ that is optionally substituted by fluorine and/or chlorine, methyl, ethyl, or carbonyl, and
- X^- represents bromide, $\frac{1}{2}$ equivalent of sulfate, sulfate, or tetrafluoroborate.
4. (Withdrawn) A compound of the formula (I) according to Claim 1

wherein

- R^1 represents methyl, ethyl, n-propyl, or isopropyl,
- R^2 represents methyl or ethyl, and
- X^- represents tetrafluoroborate.
5. (Original) A compound of the formula (I) according to Claim 1 wherein
- R^4 represents bromine.
6. (Withdrawn) A process for the preparation of compounds of formula (I-1)



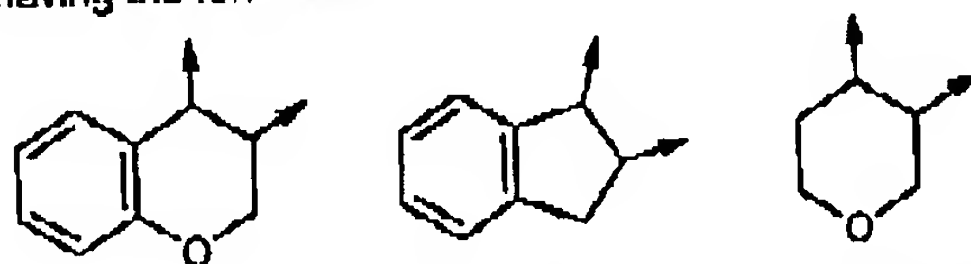
In which

- R^1 represents methyl, ethyl, n-propyl, isopropyl, hydroxyl, methylsulfonyl, ethylsulfonyl, phenylsulfonyl, p-methylphenylsulfonyl, or benzyl that is optionally substituted by halogen, nitro, C_1-C_4 -alkyl, or C_1-C_4 -alkoxy,
- R^2 represents C_1-C_4 -alkyl, hydroxyl, methylsulfonyl, ethylsulfonyl, phenylsulfonyl, p-methylphenylsulfonyl, phenyl that is optionally substituted by halogen, NO_2 , C_1-C_4 -alkyl, C_1-C_4 -halogenoalkyl, C_1-C_4 -alkylsulfonyl, C_1-C_4 -alkoxy, C_1-C_4 -halogenoalkoxy, C_1-C_4 -alkoxycarbonyl, C_1-C_4 -halogenoalkoxycarbonyl, C_1-C_4 -alkylcarbonyloxy, or C_1-C_4 -halogenoalkylcarbonyloxy, benzyl that is optionally substituted by halogen, nitro, C_1-C_4 -alkyl, or C_1-C_4 -alkoxy, or pyrrolyl, thienyl, naphthyl, or benzothiophenyl, each of which is optionally substituted by halogen, C_1-C_4 -alkyl, or C_1-C_4 -halogenoalkyl,

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R^3 represents hydrogen, methyl, or ethyl, or
 R^2 and R^3 together represent $-(CH_2)_n-$ that is optionally substituted by halogen, NO_2 ,
 carboxyl, carbonyl, C_1-C_4 -alkyl, C_1-C_4 -halogenoalkyl, C_1-C_4 -alkoxy, or C_1-C_4 -
 halogenoalkoxy or the optionally halogen-, NO_2 -, C_1-C_4 -alkyl-, C_1-C_4 -
 halogenoalkyl-, C_1-C_4 -alkoxy-, or C_1-C_4 -halogenoalkoxy-substituted groups
 having the formulas



where the arrows mark the points of linkage to the thiazole ring, and
 n represents 3, 4 or 5,

R^4 represents bromine or chlorine, and

X^- represents chloride, bromide, iodide, hydrogen sulfate, $\frac{1}{2}$ equivalent of
 sulfate, sulfate, $SbCl_6^-$, methanesulfonate, trifluoromethanesulfonate, or p-
 toluenesulfonate,

comprising

(a) reacting compounds of the formula (II)



in which R^2 , R^3 and R^4 have the meanings indicated for formula (I-1),
 with alkylating reagents of the formula (III)



in which

R^1 has the meaning indicated for formula (I-1), and

X^- represents chlorine, bromine, iodine, sulfoxy, $\frac{1}{2}$ equivalent of sulfate,
 sulfate, $SbCl_6^-$, methylsulfonyloxy, trifluorosulfonyloxy or
 toluenesulfonyloxy,

in the presence of a diluent, or

(b) reacting compounds of the formula (II)

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in which R², R³ and R⁴ have the meanings indicated for formula (I-1),
with sulfonating reagents of the formula (VII)



in which

R¹ has the meaning indicated for formula (I-1),

in the presence of a diluent, or

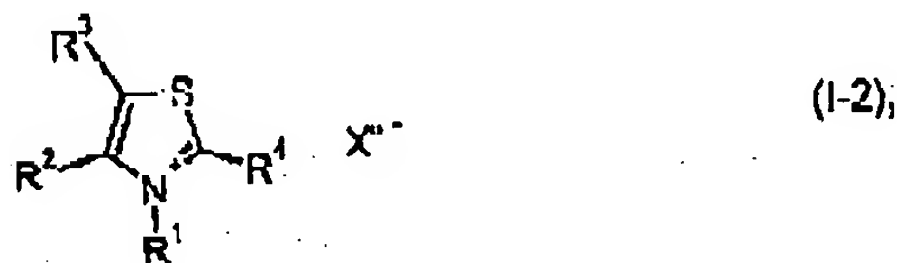
(c) oxidizing compounds of the formula (II)



in which R², R³ and R⁴ have the meanings indicated for formula (I-1),
using hydrogen peroxide, peracids, or NaOCl.

7. (Withdrawn) A process for the preparation of compounds of formula

(I-2)



in which

R¹ represents methyl, ethyl, n-propyl, isopropyl, hydroxyl, methylsulfonyl, ethylsulfonyl, phenylsulfonyl, p-methylphenylsulfonyl, or benzyl that is optionally substituted by halogen, nitro, C₁-C₄-alkyl, or C₁-C₄-alkoxy,
R² represents C₁-C₄-alkyl, hydroxyl, methylsulfonyl, ethylsulfonyl, phenylsulfonyl, p-methylphenylsulfonyl, phenyl that is optionally substituted by halogen, NO₂, C₁-C₄-alkyl, C₁-C₄-halogenoalkyl, C₁-C₄-alkylsulfonyl, C₁-C₄-alkoxy, C₁-C₄-halogenoalkoxy, C₁-C₄-alkoxycarbonyl, C₁-C₄-halogenoalkoxycarbonyl, C₁-C₄-

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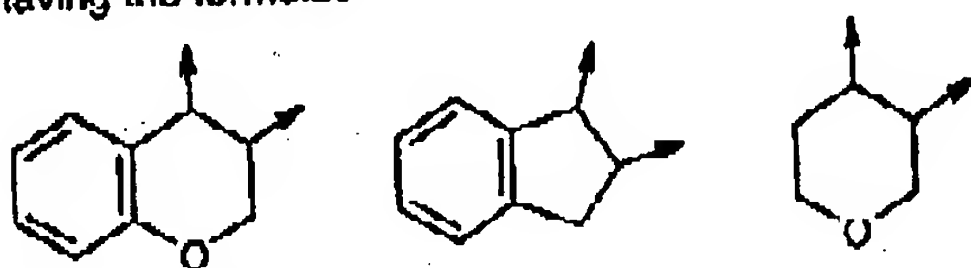
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alkylcarbonyloxy, or C₁-C₄-halogenoalkylcarbonyloxy, benzyl that is optionally substituted by halogen, nitro, C₁-C₄-alkyl, or C₁-C₄-alkoxy, or pyrrolyl, thienyl, naphthyl, or benzothiophenyl, each of which is optionally substituted by halogen, C₁-C₄-alkyl, or C₁-C₄-halogenoalkyl,

R³ represents hydrogen, methyl, or ethyl, or

R² and R³ together represent -(CH₂)_n- that is optionally substituted by halogen, NO₂,

carboxyl, carbonyl, C₁-C₄-alkyl, C₁-C₄-halogenoalkyl, C₁-C₄-alkoxy, or C₁-C₄-halogenoalkoxy or the optionally halogen-, NO₂-, C₁-C₄-alkyl-, C₁-C₄-halogenoalkyl-, C₁-C₄-alkoxy-, or C₁-C₄-halogenoalkoxy-substituted groups having the formulas



where the arrows mark the points of linkage to the thiazole ring, and

n represents 3, 4 or 5.

R⁴ represents bromine or chlorine, and

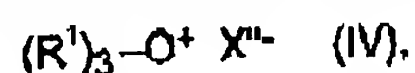
X^{m-} represents tetrafluoroborate, tetraphenylborate, or hexafluorophosphate,

comprising

(a) reacting compounds of the formula (II)

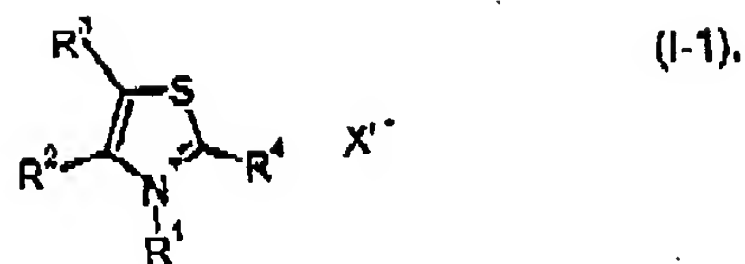


in which R², R³ and R⁴ have the meanings indicated for formula (I-2),
with alkylating reagents of the formula (IV)



in which R¹ and X^{m-} have the meanings indicated for formula (I-2),
in the presence of a diluent, or

(b) exchanging the anion X^{m-} of compounds of the formula (I 1)

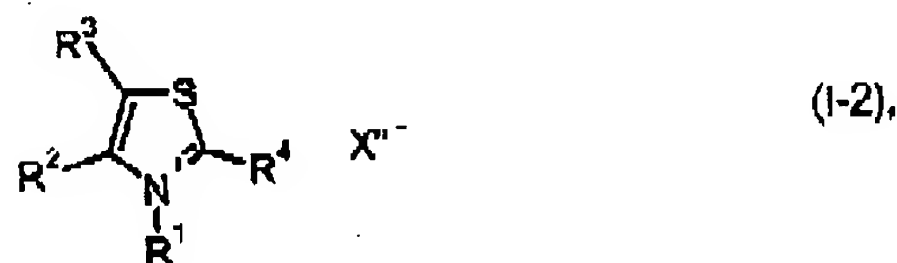


in which

R^1 , R^2 , R^3 , and R^4 have the meanings indicated for formula (I-2), and X^- represents chlorine, bromine, iodine, sulfoxy, $\frac{1}{2}$ equivalent of sulfate, sulfate, $SbCl_6^-$, methylsulfonyloxy, trifluorosulfonyloxy or toluenesulfonyloxy,

with tetrafluoroboric acid, tetraphenylboric acid, or hexafluorophosphoric acid or an anion exchanger loaded with tetrafluoroboric acid, tetraphenylboric acid, or hexafluorophosphoric acid so that X^- has the meaning indicated for formula (I-2).

8. (Original) A condensation agent comprising a compound according to Claim 1.
9. (Original) A peptide coupling reagent comprising a condensation agent according to Claim 8.
- 10 (Withdrawn) A method comprising synthesizing peptides with a condensation agent wherein the condensation agent is a compound according to Claim 1.
11. (Original) A compound of the formula (I-2)



in which

- R^1 represents methyl, ethyl, n-propyl, isopropyl, hydroxyl, methylsulfonyl, ethylsulfonyl, phenylsulfonyl, p-methylphenylsulfonyl, or benzyl that is optionally substituted by halogen, nitro, C_1 - C_4 -alkyl, or C_1 - C_4 -alkoxy.
- R^2 represents C_1 - C_4 -alkyl, hydroxyl, methylsulfonyl, ethylsulfonyl, phenylsulfonyl, p-methylphenylsulfonyl, phenyl that is optionally substituted by halogen, NO_2 , C_1 - C_4 -alkyl, C_1 - C_4 -halogenoalkyl, C_1 - C_4 -alkylsulfonyl, C_1 - C_4 -alkoxy, C_1 - C_4 -

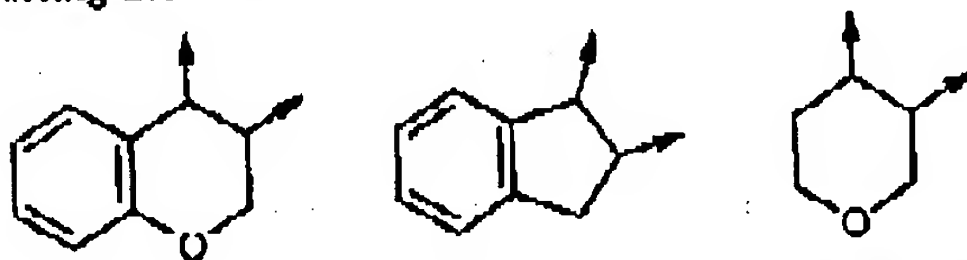
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halogenoalkoxy, C₁-C₄-alkoxycarbonyl, C₁-C₄-halogenoalkoxycarbonyl, C₁-C₄-alkylcarbonyloxy, or C₁-C₄-halogenoalkylcarbonyloxy, benzyl that is optionally substituted by halogen, nitro, C₁-C₄-alkyl, or C₁-C₄-alkoxy, or pyrrolyl, thienyl, naphthyl, or benzothiophenyl, each of which is optionally substituted by halogen, C₁-C₄-alkyl, or C₁-C₄-halogenoalkyl.

R³ represents hydrogen, methyl, or ethyl, or

R² and R³ together represent -(CH₂)_n- that is optionally substituted by halogen, NO₂, carboxyl, carbonyl, C₁-C₄-alkyl, C₁-C₄-halogenoalkyl, C₁-C₄-alkoxy, or C₁-C₄-halogenoalkoxy or the optionally halogen-, NO₂-, C₁-C₄-alkyl-, C₁-C₄-halogenoalkyl-, C₁-C₄-alkoxy-, or C₁-C₄-halogenoalkoxy-substituted groups having the formulas



where the arrows mark the points of linkage to the thiazole ring, and

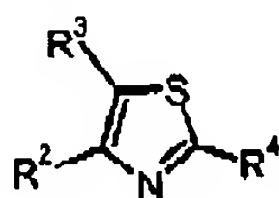
n represents 3, 4 or 5,

R⁴ represents bromine or chlorine, and

X⁻ represents tetrafluoroborate, tetraphenylborate, or hexafluorophosphate,

with the exception of compounds in which R⁴ represents bromine and R² represents CH₃ when R³ represents hydrogen or CH₃; in which R⁴ represents chlorine and R² represents CH₃ when R³ represents hydrogen; and in which R⁴ represents bromine and R² represents ethyl when R³ represents hydrogen.

12. (Withdrawn) A process for the preparation of compounds of the formula (II)



(II),

in which

R² represents C₁-C₄-alkyl, hydroxyl, methylsulfonyl, ethylsulfonyl, phenylsulfonyl, p-methylphenylsulfonyl, phenyl that is optionally substituted by halogen, NO₂, C₁-C₄-alkyl, C₁-C₄-halogenoalkyl, C₁-C₄-alkylsulfonyl, C₁-C₄-alkoxy, C₁-C₄

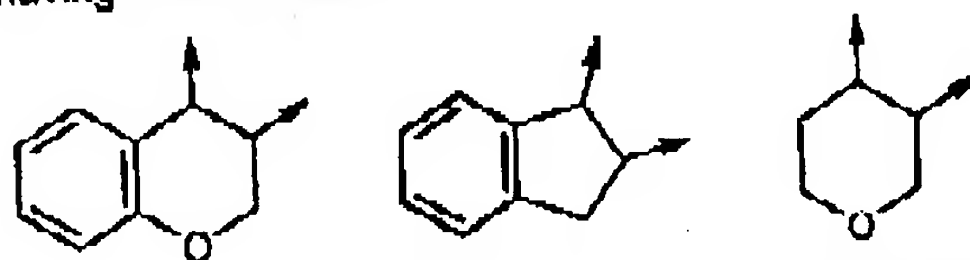
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halogenoalkoxy, C₁-C₄-alkoxycarbonyl, C₁-C₄-halogenoalkoxycarbonyl, C₁-C₄-alkylcarbonyloxy, or C₁-C₄-halogenoalkylcarbonyloxy, benzyl that is optionally substituted by halogen, nitro, C₁-C₄-alkyl, or C₁-C₄-alkoxy, or pyrrolyl, thienyl, naphthyl, or benzothienophenyl, each of which is optionally substituted by halogen, C₁-C₄-alkyl, or C₁-C₄-halogenoalkyl,

R³ represents hydrogen, methyl, or ethyl, or

R² and R³ together represent -(CH₂)_n- that is optionally substituted by halogen, NO₂, carboxyl, carbonyl, C₁-C₄-alkyl, C₁-C₄-halogenoalkyl, C₁-C₄-alkoxy, or C₁-C₄-halogenoalkoxy or the optionally halogen-, NO₂-, C₁-C₄-alkyl-, C₁-C₄-halogenoalkyl-, C₁-C₄-alkoxy-, or C₁-C₄-halogenoalkoxy-substituted groups having the formulas



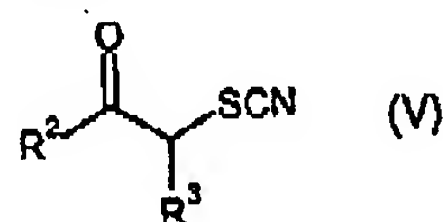
where the arrows mark the points of linkage to the thiazole ring, and

n represents 3, 4 or 5, and

R⁴ represents bromine or chlorine,

comprising

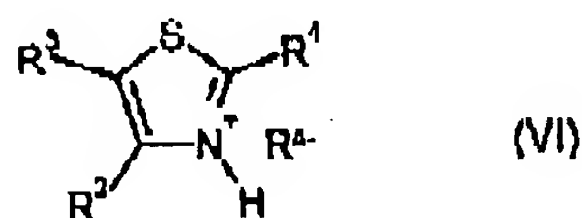
(1) reacting compounds of the formula (V)



in which

R² and R³ have one of the meanings indicated for formula (II),

with hydrogen bromide or hydrogen chloride in the presence of a diluent to form a compound of the formula (VI)



in which R², R³ and R⁴ have one of the meanings indicated for formula (II)

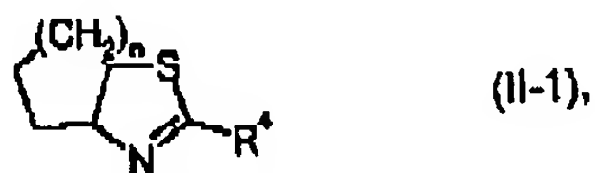
and R¹ is bromide or chloride, and

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- (2) releasing the hydrogen bromide or hydrogen chloride from the compound of the formula (VI).

13. (Withdrawn) A compound of the formula (II-1)



in which n represents 1 or 2.